ABSTRACT

Described is a firewall that automatically identifies active persistent network connections and keeps these connections alive. When the firewall determines that a particular network connection has been idle for a predetermined period of time, the firewall does not automatically delete the connection's state from its database. Instead, the firewall tries to determine whether the connection is an active persistent connection which should be kept alive for a longer period of time. To this end, the firewall sends out a message or a probe before deleting the state information entry of an idle connection from its database. The probe is designed to elicit responses from the participants of the network connection that would provide information on the current condition of the network connection. The firewall then senses the network activity caused by these responses and determines if the connection in question is still active and should be kept alive.